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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,834	01/07/2002	Kazuhiro Ebara	P/1071-1521	2656

7590 10/21/2003
Keating & Bennett, LLP
10400 Eaton Place
Suite 312
Fairfax, VA 22030

EXAMINER

HANLEY, JOHN C

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,834

Applicant(s)

EBARA ET AL.

Examiner

John C Hanley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed July 7, 2003 was considered in part. The Japanese abstracts in English language were considered. The remaining German references were not considered. They fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because there is no English translation of these references, and no concise statement of relevance other than the mere fact that they were cited in a foreign application. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

The Examiner notes, however, that Figure 44 of German reference DE 39 43 805 shows a variable resistance 284 at a location which appears to be comparable to that of applicant's variable resistance, but without a translation, cannot determine its function with respect to the overall circuit.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebara et al (US 5922954). The examiner interprets the language of Ebara et al--that the load impedances are selected to have a desired relationship between sensitivity rate change and temperature--as being inherently equivalent to applicant's claimed language of adjusting the relationship between voltage output vs. temperature change. Ebara et al teaches to adjust the load resistors of a vibration sensor (gyroscope) to change the temperature/output characteristics. For example, in the last line of the abstract, Ebara et al state, "By changing the impedances of the resistors, the characteristics of the vibration gyroscope is adjusted." The apparatus for accomplishing this method is shown. Ebara et al lacks only a specific teaching of placing variable impedances in the location of the impedances to be adjusted, and adjusting the variable impedances, or a combination of a fixed resistor and a variable resistor. Even though Ebara et al do not specify how the impedances are adjusted, it would have been very clearly obvious to one of ordinary skill in the art at the time of applicant's invention to use notoriously well known and commercially available variable resistor to adjust the resistance, as is commonly used to trim a circuit. Further regarding claim 4, it would have been obvious to one skilled in the art to use an effective resistance made up of a combination of a fixed resistor and a variable resistor to adjust a circuit resistance, so the variable resistance is made smaller to get better resolution of the adjustment vs. mechanical adjustment of the resistor, as well known to anyone skilled in the art. Applicant has not argued against this assertion made by the Examiner in the prior office action. Regarding newly added claims 9-12, the relative the load impedances relationships claimed are inherent in the

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circuit of Ebara et al, since Ebara et al utilize the same overall circuit as claimed by applicant, and Ebara et al teach to adjust these impedances for the same reason as applicant, as indicated above.

4. Applicant's sole argument relates to the use of a variable resistance to adjust a resistor. Even though applicant does not separately argue the subject matter of the newly added claims, the relationship of the various resistances recited would be inherent in the circuit of Ebara et al.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C Hanley whose telephone number is 703-305-5130. The examiner can normally be reached on M-F 9AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 703-306-4705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

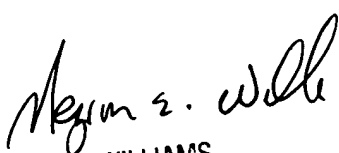
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JCH


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800